

CLAIMS

What is claimed is:

1. A door handle assembly comprising:
 - (A) a door handle, the door handle having a roller;
 - (B) a mount, the door handle being attached to the mount;
 - (C) an actuator attached to the mount, the actuator having a first surface and an actuator projection;
 - (D) a bolt, the bolt being movable from a first bolt position where at least a portion of the bolt is inside a wall aperture thereby engaging the door into the wall aperture to a second bolt position where the portion of the bolt is outside the wall aperture thereby disengaging the door from the wall aperture, the bolt having an actuator opening formed therein, the actuator projection passing through the actuator opening, wherein the roller abuts the first surface and may travel from a first roller position to a second roller position when the door handle is pushed, thereby retracting the bolt from the first bolt position to the second bolt position.
2. The door handle assembly of claim 1, wherein the door handle comprises a substantially flat surface forming a plane, the plane of the door handle being substantially parallel to a plane of a door when the door handle assembly is mounted to the door.
3. The door handle assembly of claim 1, wherein the height of the door handle measured from the door is equal to or less than 1 inch.

4. The door handle assembly of claim 1, wherein the door handle is adapted to move on a pivot axis, the pivot axis being horizontal.
5. The door handle assembly of claim 1, the mount comprising a plurality of parallel projections, the actuator being positioned between the plurality of parallel projections.
6. The door handle assembly of claim 5, further comprising a fastener, the fastener adapted to secure the actuator to the plurality of parallel projections.
7. The door handle assembly of claim 1, the mount comprising a plurality of parallel projections, the door handle comprising a door handle projection, the door handle projection being positioned between the plurality of parallel projections.
8. The door handle assembly of claim 7, further comprising a fastener, the fastener adapted to secure the door handle projection to the plurality of parallel projections.
9. The door handle assembly of claim 1, wherein the first surface is curved.
10. The door handle assembly of claim 1, wherein the first surface has a convex portion and a concave portion.

11. The door handle assembly of claim 1, further comprising a cam assembly disposed perpendicular to the bolt, the cam assembly comprising a cam attached on a cam shaft, the cam being adapted to abut at least a portion of the bolt, wherein when the cam is actuated, the cam is adapted to lock the bolt in the first position.
12. The door handle assembly of claim 11, wherein the cam assembly further comprises a cam latch attached at one end of the cam shaft, the cam latch being adapted to allow a user to actuate the cam.
13. The door handle assembly of claim 12, further comprising an alternative cam access attached to the end of the cam shaft opposite to the cam latch, the alternative cam access being adapted to allow a user to actuate the cam from the side opposite the cam latch.
14. The door handle assembly of claim 1, further comprising a pull door handle assembly located on the opposite side of the door as the door handle, the pull door handle assembly comprising an actuator adapted to pass through an actuator opening and into the bolt.

15. A door handle assembly comprising:
- (A) a door handle, the door handle having a first surface;
 - (B) a mount, the door handle being attached to the mount;
 - (C) an actuator attached to the mount, the actuator having a roller and an actuator projection;
 - (D) a bolt, the bolt being movable from a first bolt position where at least a portion of the bolt is inside a wall aperture thereby engaging the door into the wall aperture to a second bolt position where the portion of the bolt is outside the wall aperture thereby disengaging the door from the wall aperture, the first and the second position defining a sliding axis, the bolt having an actuator opening formed therein, the actuator projection passing through the actuator opening, wherein the roller abuts the first surface and may travel from a first roller position to a second roller position when the door handle is pushed, thereby retracting the bolt from the first bolt position to the second bolt position.
16. The door handle assembly of claim 15, wherein the door handle comprises a substantially flat surface forming a plane, the plane of the door handle being substantially parallel to a plane of a door when the door handle assembly is mounted to the door.
17. The door handle assembly of claim 15, wherein the height of the door handle measured from the door is equal to or less than 1 inch.

18. The door handle assembly of claim 15, wherein the door handle is adapted to move on a pivot axis, the pivot axis being horizontal.
19. The door handle assembly of claim 15, the mount comprising a plurality of parallel projections, the actuator being positioned between the plurality of parallel projections.
20. The door handle assembly of claim 19, further comprising a fastener, the fastener adapted to secure the actuator to the plurality of parallel projections.
21. The door handle assembly of claim 15, the mount comprising a plurality of parallel projections, the door handle comprising a door handle projection, the door handle projection being positioned between the plurality of parallel projections.
22. The door handle assembly of claim 21, further comprising a fastener, the fastener adapted to secure the door handle projection to the plurality of parallel projections.
23. The door handle assembly of claim 15, wherein the first surface is curved.
24. The door handle assembly of claim 15, wherein the first surface has a convex portion and a concave portion.
25. The door handle assembly of claim 15, further comprising a pull door handle assembly located on the opposite side of the door as the door handle, the pull door handle assembly comprising an actuator adapted to pass through an actuator opening and into the bolt.

26. The door handle assembly of claim 15, further comprising a cam assembly disposed perpendicular to the bolt, the cam assembly comprising a cam attached on a cam shaft, the cam being adapted to abut at least a portion of the bolt, wherein when the cam is actuated, the cam is adapted to lock the bolt in the first position.
27. The door assembly of claim 26, wherein the cam assembly further comprises a cam latch attached at one end of the cam shaft, the cam latch being adapted to allow a user to actuate the cam.
28. The door assembly of claim 27, further comprising an alternative cam access attached to the end of the cam shaft opposite to the cam latch, the alternative cam access being adapted to allow a user to actuate the cam from the side opposite the cam latch.

29. A door assembly comprising:
- (A) door handle means for opening and closing a door;
 - (B) bolt means for selectively engaging a door frame, the bolt means being movable from a first bolt position where the bolt engages a door frame aperture to a second position where the bolt is retracted from the door frame aperture;
 - (C) actuator means for selectively engaging the bolt;
 - (D) mounting means for operatively coupling the door handle means to the actuator means;
 - (E) roller means for transferring force from the door handle means to the bolt means; and
 - (F) surface means for transferring force from the door handle means to the bolt means, the roller means abutting the surface means and being moveable from a first position when the handle is not actuated to a second position when the door handle is pushed.
30. The door assembly of claim 29, wherein the roller means is coupled to the actuator means and the surface means is formed on the door handle means.
31. The door assembly of claim 29, further comprising a fastening means for securely coupling the actuator means to the mounting means.
32. The door assembly of claim 29, further comprising a fastening means for securely coupling the door handle means to the mounting means.

33. The door assembly of claim 29, wherein the roller means is coupled to the door handle means and the surface means is formed on the actuator means.
34. The door assembly of claim 29, further comprising a biasing means for biasing the bolt means toward the first position.